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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

In Application of:

Wen-Liang Hsu, et al

For: GROUP III-B METAL CATALYST
SYSTEM

Serial No.: 10/765,485

Filed: January 27, 2004

) Docket No. DN2001-239P01
) Art Unit: 1713
) Examiner: C. Caixia Lu

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Commissioner for Patents, P.O. Box 1450,
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Mary A. Nicoloff
Mary A. Nicoloff

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE IN COMPLIANCE WITH 37 C.F.R. §1.98

As a means of complying with the duty of disclosure set forth in 37 C.F.R. §1.56, the Applicants are calling the following to the attention of the Patent Office and request that they be considered by the Examiner:

United States Patent 4,663,405

United States Patent 5,405,815

United States Patent 5,502,126

However, the above-listed references may not be prior art under 35 U.S.C. §102 and this document should not be construed as an admission that any of the above-listed references are prior art within the meaning of 35 U.S.C. §102.

United States Patent 4,663,405 may be relevant to the prosecution of the subject patent application because it discloses that conjugated diolefin monomers can be polymerized with a catalyst system which is comprised of (1) an organoaluminum compound, (2) an organometallic compound which contains a metal from Group III-B of the Periodic System, such as lanthanides and actinides, and (3) at least one compound which contains at least one labile halogen atom. United States Patent 4,663,405 also discloses that the molecular weight of the polymers made with such catalyst systems can be reduced by conducting the polymerization in the presence of a vinyl halide.

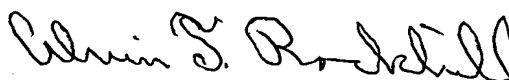
United States Patent 5,405,815 may be relevant to the prosecution of the subject patent application because it discloses a process or preparing a catalyst system which is particularly useful for copolymerizing isoprene and 1,3-butadiene monomers into rubbers

which comprises the sequential steps of (1) mixing (a) an organoaluminum hydride, (b) a member selected from the group consisting of aliphatic alcohols, cycloaliphatic alcohols, aliphatic thiols, cycloaliphatic thiols, trialkyl silanols, and triaryl silanols, and (c) optionally, 1,3-butadiene in an organic solvent to produce a modified organoaluminum catalyst component; (2) adding an organometallic compound which contains a metal from Group III-B of the Periodic System to the modified organoaluminum catalyst component to produce a Group III-B metal containing catalyst component; (3) adding a compound which contains at least one labile halogen atom to the Group III-B metal containing catalyst component; and (4) aging the catalyst system after the compound which contains at least one labile halogen atom is added to the modified Group III-B metal containing catalyst component for a period of 10 minutes to 6 hours, wherein the catalyst system is aged at a temperature which is within the range of about 30°C to about 85°C.

United States Patent 5,502,126 is relevant to the prosecution of the subject patent application because its teachings were used as a basis for rejecting the claims pending in United States Patent Application Serial No. 10/331,259, filed on December 30, 2002, of which the present patent application is a continuation-in-part application.

Copies of the above-referenced patents and Form PTO-1449 are enclosed herewith.

Respectfully submitted,



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